

## **CASA GRANDE MUNICIPAL AIRPORT MASTER PLAN**

### **CHAPTER 5 - FINANCIAL PLAN**

#### **5.1 INTRODUCTION**

This final chapter in the Master Plan/Update Study examines development costs and schedules and evaluates how airport development can be reasonably financed by federal, state, and local sources. The acceptability of the airport master plan update recommendations depend upon the ability of the airport users and community residents to meet the costs associated both with proposed developments and continued operation and maintenance.

The generation of revenues by airport users at general utility airports is usually limited. Therefore, without sufficient user revenues to support both the development and future operation of the Casa Grande Airport, the City must rely on Federal and State assistance and local general fund or tax support.

The on-airport user revenues at the airport are somewhat limited with fuel sales being the major income source. Therefore, financial planning for capital improvements is reduced to identifying and allocating the required funding among the various sponsoring units of government, namely the FAA, Arizona Department of Transportation - Aeronautics Division and the City of Casa Grande.

Although this master plan update recognizes the dependence of general aviation airports on Federal and State aid for development, alternative financial scenarios are discussed. This allows Casa Grande to make decisions based on available funds and community priorities. The scenario of no federal government funding is described to identify the full range of financial needs that must be met under the best and worst cases.

Any airport has certain fixed costs for operation and maintenance (O & M) unrelated to the number of based aircraft. It would be an ideal situation if the fees assessed on the based and transient aircraft offset the O & M costs of a typical airport. Therefore, this plan has attempted to be reasonable in the area of proposed rates and charges to foster and promote aviation activity at Casa Grande Municipal Airport.

It should be remembered that the primary source for airport development funds are derived from the aviation user in the form of ticket taxes and fuel taxes at the federal level, flight property taxes at the state level, and various airport fees (leases, parking, fuel flowage, landing fees) at the local level.

Federal and state funding can provide up to 95% of development costs on projects eligible for federal assistance. Projects not eligible for federal assistance may be eligible under state grant and loan programs.

In addition to developing new facilities, it is important to maintain existing airfield facilities.

Pavement maintenance and preservation is an important consideration.

The Casa Grande Municipal Airport services the economic well being of the community, and the principal benefactors are local businesses and industry. Medical evacuations may also be an important local concern. Because of the importance of the airport, the public and private sector needs to work together to develop long term funding for the airport.

## 5.2 DEVELOPMENT COSTS

The capital improvements are discussed in Chapter 4 for development of the Airport. In Table 5-1, a summary of the staged development costs for the Airport are presented.

PRIORITY 1	
ITEM	PROJECT COST
Construct Terminal Building (3000 s.f.)	\$345,000
Beacon Upgrade	\$ 15,000
Apron Expansion (4600 s.y.)	\$ 180,000
Construct Auto Parking (3000 s.y.)	\$ 30,000

PRIORITY 2	
ITEM	PROJECT COST
Runway 05 Extension (100' X 3000')	\$1,300,000
Relocate Canal (12,000 l.f.)	\$1,030,000
Construct Culvert Under Runway (900 l.f.)	\$2,400,000
Acquire Land for Canal (39.1 Acre)	\$ 190,000
Acquire land for Rwy Extension (108.6 Ac.)	\$ 450,000
Conduct Environmental Assessment (include Archeological Study)	\$ 85,000
Relocate ILS (Glide Slope & Middle Marker)	\$ 200,000
Relocate MALSR	\$ 400,000
Existing RWY Pavement Rehabilitation	\$ 100,000

PRIORITY 3	
ITEM	PROJECT COST
Hangar Expansion	
Construct Hangar Access Taxiway	\$320,000
Construct T-Hangar (10 Unit)	\$220,000

PRIORITY 4	
ITEM	PROJECT COST
Perimeter Fencing	
Phase I (4600 l.f.)	\$ 92,000
Phase II (13,000 l.f.)	\$240,000

Note: The estimated costs, shown above, are estimated in 1996 dollars and include a 25 percent adjustment for Engineering and Contingency costs. No escalation is included for future inflation.

### 5.3 DEVELOPMENT SCHEDULE

As previously discussed in Chapter 4, the Development Schedule is dependent on the growth of the airport and the use of the facilities. Although a schedule could be assigned, the discussion in Chapter 4 provided a trigger mechanism or action that would initiate the planning of that action. It would also be to the benefit of the City of Casa Grande, to consider the financial commitments necessary to provide the local share of the funds, when considering the schedule and development of the recommended Development Items.

## 5.4 ECONOMIC FEASIBILITY

### 5.4.1 CASA GRANDE MUNICIPAL AIRPORT FUNDS

Casa Grande Municipal Airport is owned and operated by the City of Casa Grande. A five member Airport Board named by the Mayor and City Council, determines the policy under which the Airport Manager operates the airport. The Airport Authority members are appointed to staggered two-year terms. For financial reporting purposes, the city of Casa Grande holds the airport accountable as a separate department within the city of Casa Grande Department of Public Works.

The City Engineer also acts as the Airport Manager.

The 1989 Airport Master Plan recommended that the airport be considered an enterprise fund for cost accounting purposes in order to achieve a more manageable system for tracking grant monies and expenditures. Accounts were recommended to be established for each revenue and expense category in order to facilitate better financial management of the airport.

Since the recommendation was made in the 1989 Master Plan, the budget format has been revised, and improved, and now the City's budget document contains more detail than in the past. However, it is recommended that additional detail and supporting data be provided and reviewed for the "Miscellaneous Revenues" line item. The Miscellaneous Revenues line item accounts for about 75% of the total airport operating revenues and a more detailed accounting could provide improved use of those funds.

In general, funds derived from the airport operation are used to account for operations that are financed and operated in a manner similar to private business enterprises-- where the intent of the governing body is that the costs of providing goods and services to the general public on a continuing basis be financed or recovered primarily through user charges;

At the present time, user charges are not sufficient to defray 100% of the costs of capital maintenance or improvement projects. Therefore, the city has appropriated pro-rated interest income from the city's General Fund for capital maintenance and improvements, and to offset any operational losses.

An inspection of the 1989 Master Plan and recent budgets indicates General Fund support to the airport as follows:

FISCAL YEAR	OPERATING INCOME	TOTAL M&O PLUS CAPITAL EXPENDITURES	GENERAL FUND SUPPORT *
1983	\$ 83,671	\$ 100,739	\$ 16,768
1984	85,094	90,901	5,807
1985	124,269	148,472	24,203
1986	15,923	46,787	30,846
1987	47,804	88,953	41,149
1988	142,923	206,526	63,603
1989	N/A	N/A	N/A
1990	203,273	294,146	90,853
1991	219,628	251,870	32,242
1992	205,106	233,836	28,730
1993**	353,078	455,501	102,423
1994**	327,936	401,644	73,108
1995	239,332	252,127	12,795
1996***	265,500	324,362	58,862

\* Appropriated pro-rated interest plus a combination of operating losses or capital improvement expenditures; net of transfers in and out.

\*\* Includes ADOT and FAA Grant Funds, Land Sales, etc.

\*\*\* Budgeted.

Airport operating revenue and capital improvement fund sources will be discussed in detail in the following sections.

#### 5.4.2 GENERAL OBLIGATION BONDS

The City of Casa Grande, as a municipal entity, has available a variety of financing methods to obtain the local share of airport development costs. As the airport proprietor, the city can seek bank financing based on its own financial worth, through bonds or through a combination of the two methods. The most common methods involve debt financing instruments which amortize the debt over the useful life of the project. Methods of bond debt financing commonly available to the city

are discussed in the following sections.

The City of Casa Grande, the owner and operator of the airport, is the municipal agency authorized to issue bonds. General Obligation (GO) bonds are the only form of municipal bond whose payment is secured by the full faith, credit, and taxing authority of the issuing agency. GO bonds are instruments of credit and, because of the community guarantee, reduce the available bonded debt level of the sponsoring community. This type of bond uses tax revenues to retire debt and the key element becomes the approval of the electorate to a tax levy to support airport development. If approved, GO bonds are typically issued at a lower interest rate than other types of bonds.

The Self-Liquidating Bond is a form of GO bond in Arizona which is secured by the issuing municipal agency. They are retired, however, by the adequate cash flow from the operation of the facility. Providing the state court determines that the project is self-sustaining, the debt may be legally excluded from the community's bonded debt limit. Since the credit of the local government bears the ultimate risk of default, the bond issue is still considered, for the purpose of financial analysis, as part of the debt burden of the community. Therefore, this method of financing may mean a higher rate of interest on all bonds sold by the community. The amount of increase in the interest rate depends, in part, upon the degree of exposure risk of the bond. Exposure risk occurs when there is insufficient net airport operating income to cover the level of debt service plus coverage requirements, thus forcing the community to cover the shortfall in funding. The market therefore treats the Self-Liquidating Bond much as they would Revenue Bond.

#### 5.4.3 REVENUE BONDS

Revenue Bonds, another type of bond, are payable solely from the revenue of a particular project or from operating income of the borrowing agency, such as an airport commission which lacks taxing power. Generally, they fall outside of constitutional and statutory limitations and, in many cases, do not require electorate approval. Because of the limitations on other public bonds, airport sponsors are increasingly turning to revenue bonds whenever possible.

However, revenue bonds normally carry a higher rate of interest because they lack the guarantees of general obligation bonds.

Tax Backed Revenue Bonds, are secured by a pledge of back-up tax revenues to cover principal and interest payments in cases where airport revenues are insufficient. The Revenue Tax Backed bond interest rates are usually lower than Revenue Bond rates due to their back-up tax provisions. Tax backed bonds usually require the approval of the electorate.

#### 5.4.4 ARIZONA AERONAUTICS AIRPORT DEVELOPMENT FINANCIAL ASSISTANCE

To support the Arizona Aviation Needs Plan, the State of Arizona's Department of Transportation Aeronautics Division, participates in the development of the state's airports. The State will contribute up to one half of the local share (4.47 percent) on FAA eligible projects. The State also may contribute up to as much as 50 percent or more on projects not eligible for federal assistance.

The proposed New Terminal Building is an example where the state is anticipated to play a major role. A 90% state grant for the cost of public areas (non-revenue generating areas) is anticipated. A loan for the cost of revenue generating areas (FBO area, restaurant) may also be available from State Aeronautics.

Loans are generally for a 2 to 20 year period, depending on loan purpose, time required to repay and ability to repay. Interest rates vary from 5 to 7% and are based on a formula using treasury bond rates. Interest rates are adjusted semiannually on January 1 and July 1.

Since FAA grant funds are not available for General Aviation Terminal facilities, state aid is very important. However, the extent of state participation is based on available funds and competing projects and no assurance can be made by the state that the development schedule proposed can be achieved.

In those projects that are eligible for federal funding, a 4.47 percent share has been designated for the State Department of Aeronautics. In projects not eligible for state funding, the State share has been estimated at percentages ranging from 50% to 90% in accordance with current state funding criteria.

#### 5.4.5 FEDERAL GRANTS FOR AIRPORT DEVELOPMENT

The U.S. Department of Transportation, through the Federal Aviation Administration, provides a portion of development costs for eligible airport projects through its Airport Improvement Program (AIP). The authorizing legislation indicates that the government will grant up to 91.06 percent of costs on eligible and approved airport development projects.

Projects eligible for federal grants include land acquisition for airport development, and airside facilities such as runways, taxiways, aprons and airport lighting.

Landside projects that are also considered eligible for AIP funding are projects such as airport access roads, perimeter fencing, ARFF vehicles, if required, ARFF vehicle storage buildings, associated ARFF equipment, utility costs to the extent that they are needed to serve eligible airport development, and removal of obstructions in the Runway Protection Zone and approach surfaces.

Examples of non-eligible projects include, hangar relocations, parking lots, fueling facilities, and utilities. Airport terminal and administration buildings are typically not eligible except when they are constructed at primary airports, through the use of the sponsor's entitlement funds at a 75 percent funding level. Cargo and discretionary funds may not be used for terminal development

projects.

Under the current FAA funding legislation, Casa Grande must compete with other Arizona general aviation and reliever airports for federal funds in Arizona's "State Apportionment" allocation. There is a great demand on the grant moneys and it must be recognized that some uncertainties exist concerning the availability of funding. The FAA prioritizes eligible projects and those with highest priority get funded first. The AIP legislation emphasizes maintenance of existing facilities, capacity and safety enhancements.

FAA discretionary funds are available for general aviation airports under current legislation, however, the project must compete on a regional and national level for funds with all airports.

Entitlement funds are available to commercial service airports such as Kingman and Prescott, Arizona.

#### 5.4.6 CREATION OF SPECIAL AND PRIVATE FUNDS FOR CAPITAL OUTLAY

Several possibilities exist for special funding of airport development projects. This could include development of a reserve fund under airport enterprise fund and municipal budgeting laws and regulations.

Private contributions from individuals or organizations to provide matching funds or portions of required development funds for airport projects should not be overlooked. Although not a common means of airport financing, private financing provides additional financial support to the airport, and stimulates community support for airport development.

The FAA has recently given consent for the sale and release of the Industrial Park property by the City. The revenues from the sale of the property are designated for the local share of the runway extension project.

Local banks, utility companies and business users of the airport terminal (administration) building may be sources of contributions for terminal improvement.

Casa Grande has used bank loans to finance projects in the past. This source can also be used in the future in lieu of bond financing. Standard bank loan conditions would apply.

Private development of T-Hangars, shed hangars and similar facilities can be considered. This not only reduces capital outlays, and debt service, it also relieves the airport of maintenance costs associated with these facilities.

Since the City currently owns most of the hangars and facilities on the airport, a private developer may require concessions from the City concerning rates and charges to assure a level playing field, should the City determine future hangar development will be privately funded.



#### 5.4.7 AIRPORT USER FEES

Airport user fees at the Casa Grande airport currently consists of the following:

- Land Leases
- FBO Leases
- Tiedown Fees
- Fuel Flowage Fees
- Hangar Rentals
- Terminal Building Leases (incidental concession income)
- Vehicle access gate card fees

Potential user fees could include:

- Landing fees for commercial operators and larger corporate aircraft
- Rental car concession income
- Industrial Park Airport access fees

Airport leases and use agreements are generally categorized as follows:

1. Commercial Activities
  - a. Fixed Base Operators
  - b. Limited Service Operators
2. Terminal (Administration) Building Activities
  - a. Building Rent
  - b. Concession Agreements
    - Food and Beverage
    - Vending Machines
    - Automobile Parking
    - Automobile Rental
    - Advertising
3. Other Aviation Activities, Building and Ground Leases
  - a. Fuel Flowage and Fuel Farm
  - b. T-Hangar Rental
  - c. Shade Hangar Rental
  - d. Tie-Down Fees
  - e. Landing Fees
  - f. Miscellaneous

The current lease and use agreements are summarized in the following table. This data, along with leasing and use agreement policies adopted by the Airport Board and City serve as the basis for estimating revenues in the Financial Planning Options section of the report.

**TABLE 5-1**  
**LEASE AGREEMENTS - CASA GRANDE MUNICIPAL AIRPORT**

<u>DESCRIPTION</u>	<u>TERM</u>	<u>FINANCIAL BASE</u>	<u>ANNUAL FINANCIAL COMMITMENT</u>
1. <u>Fixed Base Operator Agreements</u>			
a. <u>Roger Nelson</u> (Transfer of Walt Lehman lease)	20 yrs/w 10 yr option 3/16/81-3/15/01	1% gross proceeds Ground Lease 3¢/Sq. Ft., 1996; 3½¢ 2001, 4¢ 2006	<u>Ground Lease</u> 1996-\$1,350 2001-\$1,575 2006-\$1,800
(1) Ground Lease of 45,000 Sq. Ft.			
(2) Hangar/Office Owned by Lessee. If not removed at end of lease period, reverts to Airport.		Fuel Flowage 1.6% of wholesale price of fuel pumped through City's fuel farm.	Gross Proceeds & Fuel \$3,500 est.
(3) Exempt from Tiedown fee for 20 owned or leased aircraft; collect tiedown fees for airport from transient and based aircraft utilizing airport tiedown facilities.			
b. <u>Desert Aero Center</u>			
(1) Hangar/Office Buildings Owned by Airport.	Being Renegotiated	\$500/Month	\$6,000 (Being Renegotiated)
2. <u>Ground Leases</u>			
a. <u>Emig &amp; Givre</u> Hangar lease 4,800 sq. ft. Hangar area only. Reasonable ramp space and auto parking permitted. Hangar, if not removed at end of lease, reverts to City.	15 yrs/w 5 yr option 4/15/96-4/15/11	16¢ 1 <sup>st</sup> 5 Yrs 20¢ 2 <sup>nd</sup> 5 Yrs 24¢ 3 <sup>rd</sup> 5 Yrs Renegotiate option period	1996-\$768 2001-\$960 2006-\$1,152 2011-Renegotiate

**TABLE 5-1 (CONT'D)**  
**LEASE AGREEMENTS - CASA GRANDE MUNICIPAL AIRPORT**

<u>DESCRIPTION</u>	<u>TERM</u>	<u>FINANCIAL BASE</u>	<u>ANNUAL FINANCIAL COMMITMENT</u>
b. <u>O'Neal</u> Hangar lease 2,000 sq. ft. Hangar area only. Reasonable ramp space and auto parking permitted. Hangar, if not removed at end of lease, reverts to City.	15 yrs/w 5 yr. option 3/1/89-2/29/04	16¢ 1 <sup>st</sup> 5 Yrs 20¢ 2 <sup>nd</sup> 5 Yrs 24¢ 3 <sup>rd</sup> 5 Yrs Renegotiate option period	1989-\$320 1994-\$400 1999-\$480 2004-Renegotiate
c. <u>Olson Trust</u> Hangar lease 4,800 sq. ft. Hangar area only. Reasonable ramp space and auto parking permitted. Occasional maintenance of non-owned aircraft on fee basis permitted. Hangar, if not removed at end of lease, reverts to City.	7 yrs/w 5 yr. option 4/1/96-3/31/03	20¢ 1 <sup>st</sup> 2 Yrs 24¢ 2 <sup>nd</sup> 5 Yrs Renegotiate option period	1996-\$920 1998-\$1,152 2003-Renegotiate
d. <u>Knapp</u> Hangar lease 3,600 sq. ft. Hangar area only. Reasonable ramp space and auto parking permitted. Occasional maintenance of non-owned aircraft on fee basis permitted. No storage or mixing of ag-spray chemicals or initial washdown of ag-spray aircraft permitted. Hangar, if not removed at end of lease, reverts to City.	15 yrs/w 5 yr. option 3/1/97-2/29/12	16¢ 1 <sup>st</sup> 5 Yrs 20¢ 2 <sup>nd</sup> 5 Yrs 24¢ 3 <sup>rd</sup> 5 Yrs Renegotiate option period	1997-\$576 2002-\$720 2007-\$864 2012-Renegotiate

**TABLE 5-1 (CONT'D)**  
**LEASE AGREEMENTS - CASA GRANDE MUNICIPAL AIRPORT**

<u>DESCRIPTION</u>	<u>TERM</u>	<u>FINANCIAL BASE</u>	<u>ANNUAL FINANCIAL COMMITMENT</u>
3. <u>City Owned Hangars</u>			
Shade Hangars (18 Units)	N/A	\$55/Month	\$ 7,920
Old T-Hangars (12 Units)	N/A	\$125/Month	\$18,000
New T-Hangars (12 Units)	N/A	\$150/Month	<u>\$21,600</u>
			\$47,620 with 100% occupancy

## 5.5 FINANCIAL PLANNING OPTIONS

The Master Plan financial plan requires an estimate of capital investment, airport revenue and expenses for the next twenty year period. The short term (FY 1997-2001) is the easiest to predict. Medium term (FY 2002-2006) and long term (FY 2009-2017) are more uncertain as actual events (based aircraft, operations, proposed capital improvements) may occur earlier or later than projected. For the purposes of evaluating financial feasibility, it was estimated Priority 1 projects would be constructed in 1998-99, Priority 2 and 3 projects during the period 2002 through 2005 and Priority 3 and 4 in 2009, 2010 and 2015.

In addition, major changes in airport operating philosophies can take place. The City has been responsible for fuel sales, requiring major investments by the City in personal services and fuel purchases. In the 1996-97 fiscal year, the City returned the fuel sales to the FBO's, reducing both revenue and expenses.

Currently the City Engineer serves as part time Airport Manager, and none of his salary is allocated to the Airport budget. This could possibly change in the future as City Managers and City Councils respond to the organizational and financial constraints facing Casa Grande.

It is important for the Airport Board and City management to continuously evaluate and update the Airport's Capital Improvement Program (CIP) particularly the near term CIP. Policies need to assure airport revenues are maximized, facilities are well maintained and capital improvements meet community goals for the airport.

### 5.5.1 OPERATION AND MAINTENANCE EXPENSES

The following table summarizes the past five years actual Maintenance and Operation Expenses. Capital Outlay and Debt Retirement has also been included in the table.

**TABLE 5-2**  
**CASA GRANDE MAINTENANCE AND OPERATION EXPENSES**

<b>DESCRIPTION</b>	<b>1992/93</b>	<b>1993/94</b>	<b>1994/95</b>	<b>1995/96</b>	<b>1996/97</b>
<b>a. <u>Personal Services</u></b>					
Maintenance Salaries					
Fuel Attendant Salaries	40,905	41,145	46,075	49,085	47,727
Admin. Salaries					
Benefits	10,677	10,425	11,637	11,948	12,282
<b>Total Personal Services</b>	<b>51,582</b>	<b>51,570</b>	<b>57,713</b>	<b>61,003</b>	<b>60,009</b>
<b>b. <u>Contracted Services</u></b>	<b>15,151</b>	<b>14,447</b>	<b>33,050</b>	<b>13,951</b>	<b>9,159</b>
A/E					
Construction					
Other					
<b>Total Contracted Services</b>	<b>15,151</b>	<b>14,447</b>	<b>33,050</b>	<b>13,951</b>	<b>9,159</b>
<b>c. <u>Operating Supplies/Exp.</u></b>					
Fuel	121,580	101,870	96,441	86,862	79,653
Maintenance Supply/Exp	2,401	2,501	3,799	2,805	
Office/Misc. Exp	6,786	3,661	5,793	4,757	5,536
Utilities					
Electrical	11,764	15,924	18,897	18,981	19,973
Water/Sewer	1,168	2,449	2,360	1,850	2,338
Gas					
Phone	2,264	2,071	2,212	3,041	2,389
<b>Total Operating Supplies</b>	<b>182,959</b>	<b>128,476</b>	<b>129,502</b>	<b>118,296</b>	<b>109,889</b>

**TABLE 5-2 (CONT'D)**  
**CASA GRANDE CAPITAL OUTLAY/DEBT RETIREMENT**

DESCRIPTION	1992/93	1993/94	1994/95	1995/96	1996/97
a. <u>Capital Outlay (Describe)</u>					
1993					
1994					
1995					
1996					
1997					
<b>Total Capital Outlay</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
b. <u>Debt Retirement (Describe)</u>					
1993 - T-Hangar Construction		12,678	12,690	15,298	13,000
1994					
1995					
1996					
1997					
<b>Total Debt Service</b>	<b>0</b>	<b>12,678</b>	<b>12,690</b>	<b>15,298</b>	<b>13,000</b>

Note: A/E - Architectural and Engineering Costs

Operating and Maintenance expenses during the planning period have been estimated as follows:

### Personnel Services

Personnel services include administrative salaries and maintenance salaries. No salaries have been included for airport fuel attendants. Benefits (FICA, workman's compensation, health insurance, public employees retirement) have been estimated at 25% of salaries.

Administrative salaries have been estimated at 0.05 Full Time Equivalent (FTE)(about 8 hours/month) increasing to 0.1 FTE at the end of the study period.

Maintenance salaries have been estimated at 0.25 FTE (about 40 hours/month) increasing to 1.00 FTE at the end of the study period.

### Contractual Services

A/E and construction services have been included in Capital Improvement costs. The line item has been maintained to account for the various services which have been traditionally been budgeted by the City under this line item. \$15,000 has been budgeted in Table 5-3. This is slightly below the average of the past 5-years.

### Operating Supplies and Maintenance Expenses

The following items have been included under this general heading:

Administrative Expenses -	Office supplies, Board expenses and memberships
Education and Travel -	Training for airport staff and Board members
Airside Maintenance -	Supplies and services associated with airfield and airport access maintenance
Building Maintenance -	Supplies and services associated with Terminal Building, T-hangar and Shade Hangar facilities
Equipment Maintenance -	Supplies and services associated with maintaining airport equipment (or city equipment used by the airport)
Utilities -	Cost of utilities associated with the airfield and buildings
Airfield Electrical	
Building Electrical	
Water/Sewer	
Telephone	

These expenses have been based on the 1997 budget. For items not specifically budgeted in the past, an allowance has been made based on typical airport expenses. These expenses have been estimated to increase gradually throughout the study period as new facilities are constructed and



airport operations increase.

### Capital Outlays

A line item has been included for capital outlays to include equipment, small capital improvements or minor repairs to airside, access and building facilities. This line item has been estimated at \$7,500/year throughout the planning period.

Capital outlays does not include major capital improvement projects which involve federal or state grant moneys, or debt retirement. These costs are discussed in the following sections.

### Summary of Maintenance and Operation Expenses

Maintenance and operation expenses have been summarized in section 5.5.3 in Table 5.3. Projected Budget for Developing and Maintaining the Casa Grande Municipal Airport.

## 5.5.2 CAPITAL IMPROVEMENT AND EXPENSES

The following Capital Improvement Projects have been included in the budget projections in Section 5.5.3.

PRIORITY 1				
PROJECT DESCRIPTION	TOTAL COST	FEDERAL SHARE (90%)	STATE SHARE	LOCAL SHARE
Construct Terminal Building	\$345,000	\$0	\$211,140	\$23,460 \$110,400*
Beacon Upgrade	\$15,000	\$13,500 (90%)	\$750 (5%)	\$750 (5%)
Apron Expansion	\$180,000	\$162,000 (90%)	\$9,000 (5%)	\$9,000 (5%)
Construct Auto Parking	\$30,000	\$0	\$0	\$30,000**

\* Assumes that a state loan will be required for 32% of area which is revenue generating area. A 90% state grant will be requested for the remaining non-revenue area. This results in \$211,140 being a state grant, with \$110,400 financed by a state loan and local funds. \$23,460 is required to match the state grant.

\*\* A \$30,000 state loan is required for the parking area.

PRIORITY 2				
PROJECT DESCRIPTION	TOTAL COST	FEDERAL SHARE (90%)	STATE SHARE (5%)	LOCAL SHARE (5%)
Runway 05 Extension (100' X 3000')	\$1,300,000	\$1,170,000	\$65,000	\$65,000
Relocate Canal (12,000 l.f.) OR	\$1,030,000	\$927,000	\$51,500	\$51,500
Construct Culvert Under Runway (900 l.f.)	\$2,400,000	\$2,160,000	\$120,000	\$120,000
Acquire Land for Canal (39.1 Acre)	\$190,000	\$171,000	\$9,500	\$9,500
Acquire land for Rwy Extension ( 108.6 Acre)	\$450,000	\$405,000	\$22,500	\$22,500
Conduct Environmental Assessment (include Archeological Study)	\$85,000	\$76,500	\$4,250	\$4,250
Relocate ILS (Glide Slope & Middle Marker)	\$200,000	\$180,000	\$10,000	\$10,000
Relocate MALSR	\$400,000	\$360,000	\$20,000	\$20,000
Existing RWY Pavement Rehabilitation	\$100,000	\$90,000	\$5,000	\$5,000

PRIORITY 3				
PROJECT DESCRIPTION	TOTAL COST	FEDERAL SHARE (90%)	STATE SHARE	LOCAL SHARE
Hangar Expansion				
Construct Hangar Access Taxiway	\$320,000	\$288,000 (90%)	\$16,000 (5%)	\$16,000 (5%)
Construct T-Hangar (10 Unit)	\$220,000	\$0	\$0	\$220,000*

\* State Loan

PRIORITY 4				
PROJECT DESCRIPTION	TOTAL COST	FEDERAL SHARE (90%)	STATE SHARE (5%)	LOCAL SHARE (5%)
Perimeter Fencing				
Phase I (4600 l.f.)	\$92,000	\$82,800	\$4,600	\$4,600
Phase II (13,000 l.f.)	\$240,000	\$216,000	\$12,000	\$12,000

On FAA federally participating projects where state aid is available, we have generally assumed the local matching share can be budgeted over a one or two year period. On state aid projects, where local funding requirements may be significantly higher, debt financing has been assumed, with terms ranging from 5 to 15 years. In the case of state loans an interest rate of 7% has been assumed. A prime rate of 8.25% has been assumed for bank loans; tax exempt bond rates are currently in the 5.5% (G.O.) to 7.0% (revenue bond) range. However, the size of most projects is such that bond financing may not be attractive to bond fiscal agents.

### 5.5.3 BUDGET PROJECTIONS - FINANCIAL FEASIBILITY

Table 5-3, Projected Budget for Developing and Maintaining the Casa Grande Municipal Airport summarizes cash flows during the study period.

For the purposes of evaluating financial feasibility, it was estimated Priority 1 projects would be constructed in 1998-99, Priority 2 and 3 projects during the period 2002 through 2005 and Priority 3 and 4 in 2009, 2010 and 2015.

For the construction of the terminal building and associated Priority 1 improvements, the following financial scenario was assumed.

Total Cost	\$ 570,000
State and Federal Grants	396,390
Local Grant Match	33,210
State Loan (Local)	<u>140,400</u>
Total Project	\$ 570,000

The local grant match was assumed to be paid over two years. A loan of \$140,400 for the revenue producing areas in the terminal building and the auto parking was estimated to be repaid over 10 years at 7% interest.

The Priority 2 runway extension project is expected to take three years to accomplish. The cost of the project is:

Total Cost	\$3,755,000
State and Federal Grant	\$3,567,250
Local Grant Match	\$ 187,750

A 15-year loan for the entire local grant match was used in the analysis, resulting in annual payments of \$20,615 assuming 7% interest.

T-hangars are anticipated to be constructed 2005 and 2015. A 10-year loan for the local cost of the hangar, \$220,000, was used in the analysis. The \$16,000 local match for the access taxiway was budgeted in the year of construction.

Security fencing was programmed for construction in 2009 and 2010 with the local share budgeted annually.

The following assumptions were used for the income projections.

<b>Land Leases</b>	-	A new hangar would be constructed every five years, land rental rates would increase at the same rate in the future (about 4¢ per square foot every five years).
<b>FBO Leases</b>	-	\$12,000 annual income was estimated, excluding fuel sales.
<b>Hangar Leases</b>	-	Current rates were maintained, with 10-unit T-hangars projected to be constructed in 2005 and 2015.
<b>Tiedown Fees</b>	-	Projected to increase at 2% per year.

**Fuel Sales** - A fuel flowage fee based on 5¢ per gallon starting in 1999 was used, along with a 2% growth rate. The basic fuel flowage fee was increased to 6¢ in 2002 when the runway extension program was projected to start. Another one cent increase was programmed in 2007.

**Terminal Rent** - Revenue producing rental income was based on the local cost of the building, including an allocation of 50% of the public space to revenue producing areas. With an allowance for utilities, the estimated rents are:

FBO Office - \$3,740 (\$17/sq.ft.)

Restaurant - \$15,130 (\$17/sq.ft.)

The total rent is slightly less than the debt cost.

The projections also assumed restaurant rent at 50% of the computed rent for three years to allow for equipment purchase by the leasee.

**Land Sales** - Average land sales of \$40,000 per year were estimated.

The projected budget is intended to be a budget illustration without inflation. It takes into account growth, but does not adjust income or expenses for inflationary factors.

The projected budget indicates the proposed improvements are financially feasible. If land sales do not meet expectations, then general fund expenditures will be required.

Should land sales exceed the amount projected, then debt financing could be reduced. Depending on the term of the loan and interest rate, payments can equal or exceed loan principal amounts.

The debt financing in the budget can be summarized as follows:

ESTIMATED DEBT FINANCING

<u>Project Description</u>	<u>Annual Payment</u>	<u>Total Principal</u>	<u>Total Interest</u>
1. Current T-Hangar Loan (final payment 2001)	\$14,000	N/A	N/A
2. Terminal Building, Auto Parking, Apron Expansion (1999 thru 2008)	\$19,990	\$140,400	\$59,500

ESTIMATED DEBT FINANCING (CONT'D)

	<u>Project Description</u>	<u>Annual Payment</u>	<u>Total Principal</u>	<u>Total Interest</u>
3.	Runway Extension (2002 thru 2016)	\$20,615	\$187,750	\$121,475
4.	T-Hangar Construction (2006 thru 2015 and 2016 thru 2025)	\$31,320	\$220,000	\$93,200

TABLE 5-3

PROJECTED BUDGET FOR DEVELOPING AND MAINTAINING THE  
CASA GRANDE MUNICIPAL AIRPORT

	PRIORITY 1					PRIORITY 2 & 3					PRIORITY 3 & 4									
REVENUES	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Land Lease-Aviation	2,700	2,820	2,940	3,060	3,180	4,100	4,250	4,400	4,550	4,700	5,650	5,800	5,950	6,100	6,250	7,200	7,410	7,620	7,830	8,040
FBO Lease	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Hangar Lease	46,000	46,000	46,000	46,000	46,000	46,000	46,000	46,000	46,000	64,000	64,000	64,000	64,000	64,000	64,000	64,000	64,000	64,000	64,000	82,000
Tiedown Fees	1,500	1,530	1,561	1,592	1,624	1,656	1,689	1,723	1,757	1,793	1,828	1,865	1,902	1,940	1,979	2,019	2,059	2,100	2,142	2,185
Fuel Sales	1,300	1,326	4,700	4,794	4,890	5,985	6,105	6,227	6,352	6,479	7,710	7,864	8,021	8,181	8,345	8,512	8,682	8,856	9,033	9,214
Terminal Rent			3,740	3,740	3,740	3,740	3,740	3,740	3,740	3,740	3,740	3,740	3,740	3,740	3,740	3,740	3,740	3,740	3,740	3,740
Terminal Resturant/Concessions			7,565	7,565	7,565	15,130	15,130	15,130	15,130	15,130	15,130	15,130	15,130	15,130	15,130	15,130	15,130	15,130	15,130	15,130
Other Operating Income	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Total Operating Revenue	64,500	64,676	79,506	79,751	79,999	89,611	89,914	90,220	90,529	108,841	111,058	111,399	111,743	112,092	112,444	113,601	114,021	114,446	114,875	133,309
Land Sales-Industrial	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000
Interest/Other Income	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Total Non-Operating Revenue	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000
Total Revenue	106,500	106,676	121,506	121,751	121,999	131,611	131,914	132,220	132,529	150,841	153,058	153,399	153,743	154,092	154,444	155,601	156,021	156,446	156,875	175,309
EXPENSES																				
Personnel Services	12,500	14,000	15,500	17,000	18,500	20,000	21,500	23,000	24,500	26,000	27,500	29,000	30,500	32,000	33,500	35,000	36,500	38,000	39,500	41,000
Contractual Services	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
Operating Supplies/Maint.Exp.	8,000	8,080	8,161	8,242	8,325	8,408	8,492	8,577	8,663	8,749	8,837	8,925	9,015	9,105	9,196	9,288	9,381	9,474	9,569	9,665
Utilities	25,000	25,000	30,000	30,000	30,000	30,000	30,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000
Capital Outlay	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
Total Operating Expenses	68,000	69,580	76,161	77,742	79,325	80,908	82,492	87,077	88,663	90,249	91,837	93,425	95,015	96,605	98,196	99,788	101,381	102,974	104,569	106,165
Debt Retirement	14,000	14,000	33,990	33,990	33,990	40,605	40,605	40,605	40,605	71,925	71,925	71,925	51,935	51,935	51,935	51,935	51,935	51,935	51,935	51,935
Capital Improvement Local Cost		16,605	16,605							16,000			4,600	12,000					16,000	
Total Capital Improvement Costs	14,000	30,605	50,595	33,990	33,990	40,605	40,605	40,605	56,605	71,925	71,925	71,925	56,535	63,935	51,935	51,935	51,935	51,935	67,935	51,935
Total Expenses	82,000	100,185	126,756	111,732	113,315	121,513	123,097	127,682	145,268	162,174	163,762	165,350	151,550	160,540	150,131	151,723	153,316	154,909	172,504	158,100
Net Income (Deficit)	24,500	6,491	(5,250)	10,018	8,684	10,098	8,817	4,538	(12,739)	(11,333)	(10,704)	(11,952)	2,194	(6,448)	4,313	3,878	2,706	1,537	(15,629)	17,209
Cumulative Cash Flow	24,500	30,991	25,741	35,759	44,443	54,541	63,358	67,896	55,157	43,824	33,120	21,169	23,362	16,914	21,228	25,106	27,811	29,348	13,719	30,928

DEVELOPMENT PROGRAM COSTS

Terminal Building/Auto Parking  
Apron Expansion/Beacon

Runway Extension including  
Land Aquisition/NavAids

T-hangar Construction

Security Fencing

T-hangar Constr.

Total Cost

570,000

3,755,000

540,000

92,000 240,000

540,000

Local Cost

173,610

187,750

236,000

4,600 12,000

236,000

Est. Ann. Debt Retirement

19,990 10 yrs @ 7%

20,615 15 yrs @ 7%

31,320 10 yrs @ 7%

31,320 10 yrs @  
7%

#### 5.5.4 REVENUE SOURCES - RECOMMENDATIONS

It should be the goal of the airport to develop lease or use agreements which:

- A. Permit maximum generation of revenues to the Airport without creation of an undue financial burden on the lessee.
- B. Obligate the Airport to an absolute minimum of operational costs in the leased areas.
- C. Fulfill the long-term public service goals inherent in operating public use facilities.
- D. Attract the investment of private capital to development of the Airport.

Types of Rates and Charges. The principle underlying the establishment of rates and charges is that each tenant on the Airport and each user of the airfield should pay an appropriate rate or fee for such tenancy of use. With regard to the various users of the Airport, the following are typical policies:

- A. Terminal Building: All terminal building space occupants, except the food and beverage and any merchandising concessionaires, pay standard rates per square foot per year for similar types of terminal building space exclusively leased. Rate(s) are determined on the basis of actual, fully allocated costs incurred by the Airport in providing, operating, and maintaining the terminal building.

Differential rates for various types of space may be established based on the degree of public exposure and the extent and cost of building finish and services (such as air conditioning) provided.

In addition, all space occupants in the terminal building engaged in commercial operations (such as food/beverage, news/gifts, insurance, and advertising concessionaires) pay a privilege fee (usually a percentage of gross receipts against a minimum annual guarantee). Generally, the minimum annual guarantee is not less than the cost of providing the space.

- B. Airfield Use: All users of the airfield pay a field use fee regardless of any other space or ground rentals that they may be paying on the Airport.

(1) For scheduled airline or commercial/business users a specific landing fee will be developed on the basis of maximum certificated gross landing weight of aircraft operated.

(2) For general aviation aircraft users, a use charge will be obtained through a fuel flowage fee.



(3) For military users, either a landing fee or a service charge will be negotiated on the basis of the type of mission and the aircraft operated consistent with the FAA Grant Assurances.

(4) For any off-Airport users desiring airfield access, special airfield use agreements are negotiated requiring the off-Airport user to pay the cost of any taxiways extended to the Airport boundary, a fuel flowage fee, and a special Airport access fee.

C. Buildings and Grounds: All building tenants pay a ground rental for the gross area leased. In addition, any tenant of an Airport-owned building pays a building rental.

Leases will identify ground rentals and building rentals separately, as well as any other use fees or charges.

In all cases, the tenant leases all areas made available for its exclusive use and pays rental for the entire area leased, including (in the building and grounds area) automobile parking areas, apron area, the land underlying any existing buildings, and any other areas exclusively used.

The above revenue generation principals were used to estimate airport revenues in the Section 5.4.3 budget projections. The following paragraphs discuss FBO leases, ground and hangar leases, terminal building leases, fuel flowage fees, landing fees, and industrial park access fees.

#### FBO Leases

Current FBO leases provide the City with income based on one percent of gross sales. The 1989 Master Plan considered this revenue as significantly lower than at comparable airports.

We would suggest the following for FBO leases:

- Rental of airport owned buildings at annual rates of about 10% of the market value. (A 6% to 12% range is typical). If the building is fully depreciated, building rental rates could be established in accordance with current market demand conditions. Ground rental rates for leased areas apply.
- Ground Leased Areas. In all cases, the FBO should lease all areas made available for its exclusive use and pay rental for the entire area leased including automobile parking areas, apron areas, the land underlying buildings, and any other areas exclusively leased (fuel farms for example). Ground lease rates at about 10% of market value is within the 6% to 12% typical rate.

Ground rental rates of 6¢ to 13¢ per square foot for unimproved land and 12¢ to 25¢ for improved land are typical.

- A Fuel Flowage fee based on a rate per gallon. Currently the City furnishes the fuel farm and receives a fuel flowage fee of 1.6% of the wholesale price of fuel. Fuel flowage fees at airports currently vary from 4¢ to 8¢ per gallon with rates of 6 or 7¢ being fairly common. In addition, the City should receive a return on its fuel farm investment. At airports where the fuel farm is privately owned, a ground lease is typical in addition to the fuel flowage fee.
- Tiedown Fees. If the FBO does not lease apron area on an exclusive basis, then the City should establish tiedown fees and require the FBO's to collect them

The 1989 Master Plan recommended the following fees:

#### **Typical Local and Transient Tiedown Fees**

<u>Aircraft Type</u>	<u>Monthly Local Tiedown</u>	<u>Daily Transient Tiedown</u>
Single Engine 4-6 place	\$25	\$ 5
Twin Engine, 4-6 place	30	6
6-place, <12,500 pounds	30	8
12,500 to 20,000 pounds	40	15
In excess of 20,000 pounds	50	20

Currently the airport does not charge a tiedown fee to based aircraft. Transient aircraft are charged \$4 per night or \$20 per month.

Consideration should be given to charging local aircraft a tiedown fee if they park in a paved (improved) area. No fee should be charged if aircraft park in unpaved (dirt) areas.

#### Landing Fees

Many airport assess a landing fee for transient aircraft over 12,500 lbs. gross landing weight and for commercial operations (corporate (business) aircraft, air taxi, small package freight). Landing has fees of \$1.00/1000 pounds are not uncommon. The landing fee for an aircraft weighing 12,500 # would be \$12.50. For smaller air taxi type aircraft, minimums of \$7.50 may be reasonable.

In some instances, the fuel flowage fee is credited against the landing fee. This encourages use of fuel services provided at the airport.

#### Terminal Fees

Terminal rents of \$18 to \$25 per square foot are common. A portion of the public space needs to be allocated to the tenants, as this supports all the terminal tenants.

Concession fees for restaurants typically run from 5 to 7.5% of gross, with a minimum rental based on space used negotiated.

Other concessions, vending machines, rental car, phones, for example, are charged a concession fee of 5% to 10% of gross with 10% being fairly common. Off airport rental car fees of 5% is fairly typical, with 10% being the industry standard for on airport companies.

#### Summary

Several of the fees discussed above may not be appropriate at this time for Casa Grande airport users. However, City investment at the airport increasing, and the City's desire is to minimize taxpayer support.

There is a need to increase on airport revenue to accomplish this goal.

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